* **Summary**

[Summary item options](https://onlinecampus.bu.edu/webapps/blackboard/content/listContentEditable.jsp?content_id=_6587022_1&course_id=_55146_1#contextMenu)[Hide Details](https://onlinecampus.bu.edu/webapps/blackboard/content/listContentEditable.jsp?content_id=_6587022_1&course_id=_55146_1)Theories and techniques that enable computing systems to behave intelligently. Search, constraint propagation, knowledge representation, natural language, introduction to machine learning, and inference.

* **Prerequisites**

MET CS 248 and MET CS 341 -OR- MET CS 342 -OR- instructors consent.

* **Learning Objectives**

Students will accomplish the following.

(1) Understand the goals and applications of AI

(2) Apply principal AI technologies

(3) Implement more than one of these techniques in a significant manner

* **Syllabus**

1. Jan 24: Introduction  
   
2. Feb 1: Searching for Solutions   
   
3. Feb 7:  Constraint Satisfaction  
  
4. Feb 14: Reasoning in First-Order Logic  
   
5. Feb 21: Planning   
   
6.  Feb 28: Uncertainty   
   
7. March 7: tba      
   
8. >NOTE March 21:  Introduction to Machine Learning   
   
9. March 28:  Reinforcement Learning    
   
10. April 4:  tba + interim project discussion  
   
11. April 11:  Natural Language   
  
12. April 18: tba  
  
13. April 25: presentations 1/2  
  
14. May 2: presentations 2/2

**Textbook and Other Source Book**

"Artificial Intelligence: A Modern Approach" (Prentice Hall) Third Edition, by  Russell and Norvig

**https://onlinecampus.bu.edu/images/ci/icons/generic_updown.gifContacting Me**

e-mail ==========>ebraude@bu.edu

In person ==========> Office hours below (just show up), and by appointment.

Wednesdays and Thursdays, 4:00-5:30 Room 331, 1010 Commonwealth Avenue

Skype ====> Feel free to set up a time by e-mail

Phone ==========>Feel free to contact me by phone at (978)806-5724 any time except Friday nights through Saturdays.



**Assignments and Evaluation**

Attendance at class: Class discussions and in-class group work is an important part of learning. The percentages below are predicated on virtually full attendance.

Labs (Pass/Fail--see below): 15%

Project Proposal: 15%

Project Design: 30%

Project Implementation: 40%

**Evaluation of Student Work**

Work will be evaluated according to an evaluation matrix. Unless a matrix particular to an assignment is given, the default matrix [here](https://docs.google.com/spreadsheets/d/1O3HlJtcH9AjBNnuxMp4oUCL15VDs7dLXU6FwL8VWG-Q/edit?usp=sharing) will be used. Make sure that your work conforms well to each of the criteria.  
The main goal of grading for the course is for each student to improve via feedback.

The average grade of MET graduate students is expected to be very good--B+.   
The project phases are graded according to the attached evaluation matrix. These are averaged using A+=97, A=95, A-=93, B+=87, B=85 etc.

To get an A grade for the course, your weighted average should be

>93 for an A

>=90 for an  A-

>=87 for a B+

>83 for a B

>=80 for a B-  etc.

The lab grades are: Acceptably on track (1), Not yet acceptably on track (0), and Neither (0.5).

Late homework or lab will not ordinarily be accepted unless there is reason, given in advance if that is possible, why it is or was not reasonably possible to perform the work in the time. Extraordinary workloads, illness and emergency conditions will be accepted. Documentation will be required. If the reason is acceptable, missing work may be graded on a pass/fail basis.